

WHAT IS CLAIMED IS:

- 1 1. A carrier for receiving and electrically contacting individually separated dies for the
2 testing and/or burn-in of the same, wherein the carrier comprises:
 - 3 a support structure;
 - 4 first contacts disposed on the support structure and arranged in a grid pattern
 - 5 corresponding to a die to be contacted;
 - 6 elastomer bumps provided on the first contacts;
 - 7 second contacts formed on the elastomer bumps, wherein the second contacts are
 - 8 electrically connected to the first contacts; and
 - 9 at least one opening in the support structure wherein dies placed on the support structure
 - 10 can be drawn against the elastomer bumps by a force generated by a vacuum and applied through
 - 11 the opening.
- 1 2. The carrier of claim 1 wherein the second contacts are comprised of gold.
- 1 3. The carrier of claim 1 wherein the electrical connection of the first contacts to the second
2 contacts is established by conductor tracks rising on the elastomer bumps in a spiral or arcuate
3 manner to a tip of the elastomer bump.
- 1 4. The carrier of claim 3 wherein the conductor tracks comprise a copper-nickel-gold layer
2 construction.
- 1 5. The carrier of claim 1 wherein a gold-gold contact is realized between the die and the
2 carrier by a re-distribution layer arranged on the die.

1 6. The carrier of claim 1 wherein the re-distribution layer comprises a copper-nickel-gold
2 layer construction.

1 7. The carrier of claim 1 and further comprising a cover overlying the support structure.

1 8. The carrier of claim 7 wherein the cover is formed as a spring element.

1 9. A method of processing a semiconductor die, the method comprising:
2 providing a semiconductor die, the die including contacts formed in a pattern;
3 providing a carrier, the carrier comprising first contacts disposed over a surface of a
4 support structure, elastomer bumps provided on the first contacts, and second contacts formed on
5 the elastomer bumps, wherein the second contacts are arranged in a pattern corresponding to the
6 pattern on the die, the second contacts being electrically coupled to the first contacts;
7 placing the die on the support structure of the carrier;
8 securing the contacts of the die against the elastomer bumps by a predetermined force
9 generated by a vacuum; and
10 evaluating the semiconductor die.

1 10. The method of claim 9 wherein the die is fixed until the contacts of the die are secured
2 against the elastomer bumps.

1 11. The method of claim 10 wherein the fixing of the die takes place by a cover, wherein the
2 cover compresses the elastomer bumps with a predetermined pressing force after placing.

1 12. The method of claim 11 wherein the pressing force is approximately 2 to 8 grams per
2 elastomer bump.

1 13. The method of claim 11 wherein the cover is formed as a spring element.

1 14. The method of claim 9 wherein providing a semiconductor die comprises:
2 fabricating a wafer that includes a plurality of semiconductor dies; and
3 separating the wafer to provide the semiconductor die.

1 15. The method of claim 9 wherein evaluating the semiconductor die comprises testing the
2 semiconductor die.

1 16. The method of claim 9 wherein evaluating the semiconductor die comprises burning-in
2 the semiconductor die.

1 17. The method of claim 9 wherein the second contacts of the carrier are comprised of gold.

1 18. The method of claim 9 wherein the electrical connection of the first contacts to the
2 second contacts is established by conductor tracks rising on the elastomer bumps in a spiral or
3 arcuate manner to the tip.

1 19. The carrier of claim 18 wherein the conductor tracks comprise a copper-nickel-gold layer
2 construction.

1 20. The carrier of claim 9 wherein a gold-gold contact is realized between the die and the
2 carrier by re-distribution layers being arranged on the die, and wherein the re-distribution layers
3 comprise a copper-nickel-gold layer construction.